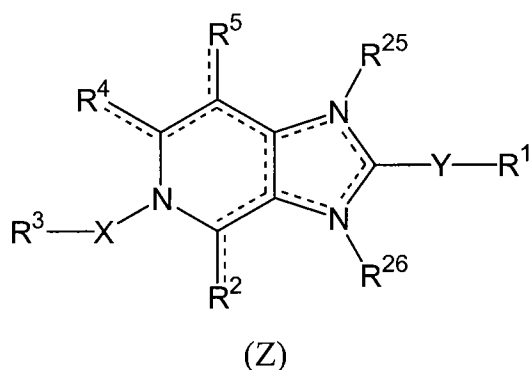


## AMENDMENTS TO THE CLAIMS

1-22. (Cancelled)

23. (Currently amended) Method for treatment ~~or prevention~~ of a Flaviviridae or Picornaviridae viral infection comprising the step of administering an effective amount of an imidazo[4,5-c]pyridine derivative of formula (Z), or a pharmaceutically acceptable salt thereof,



wherein:

- the dotted lines represent an optional double bond, provided that no two double bonds are adjacent to one another, and that the dotted lines represent at least 3, optionally 4, double bonds;
- ~~R<sup>1</sup> is selected from hydrogen; aryl unsubstituted or substituted with one or more R<sup>6</sup>; heterocyclic ring unsubstituted or substituted with one or more R<sup>6</sup>; C<sub>3-10</sub> cycloalkyl unsubstituted or substituted with one or more R<sup>6</sup>; and C<sub>4-10</sub> cycloalkenyl unsubstituted or substituted with one or more R<sup>6</sup>;~~

- Y is selected from the group consisting of a single bond;  $\text{O}$ ;  $\text{S}(\text{O})_m$ ;  $\text{NR}^{11}$ ; and a divalent, saturated or unsaturated, substituted or unsubstituted  $\text{C}_1\text{C}_{10}$  hydrocarbon group optionally including one or more heteroatom(s) in the main chain, said heteroatom(s) being selected from the group consisting of O, S, and N (such as  $\text{C}_{1-6}$  alkylene,  $\text{C}_{2-6}$  alkenylene,  $\text{C}_{2-6}$  alkynylene,  $\text{O}(\text{CH}_2)_{1-5}$ ,  $(\text{CH}_2)_{1-4}\text{O}$ ,  $(\text{CH}_2)_{1-4}\text{S}$ ,  $\text{S}(\text{CH}_2)_{1-5}$ ,  $(\text{CH}_2)_{1-4}\text{S}(\text{CH}_2)_{1-4}$ ,  $\text{NR}^{11}(\text{CH}_2)_{1-5}$ ,  $(\text{CH}_2)_{1-4}\text{NR}^{11}$ ,  $(\text{CH}_2)_{1-4}$  and  $\text{C}_{3-10}$  cycloalkylidene);
- each  $\text{R}^2$  and  $\text{R}^4$  is independently selected from the group consisting of hydrogen;  $\text{C}_{1-18}$  alkyl;  $\text{C}_{2-18}$  alkenyl;  $\text{C}_{2-18}$  alkynyl;  $\text{C}_{1-18}$  alkoxy;  $\text{C}_{1-18}$  alkylthio; halo; OH; CN;  $\text{NO}_2$ ;  $\text{NR}^7\text{R}^8$ ;  $\text{OCF}_3$ ; haloalkyl;  $\text{C}(=\text{O})\text{R}^9$ ;  $\text{C}(=\text{S})\text{R}^9$ ; SH; aryl; aryloxy; arylthio; arylalkyl;  $\text{C}_{1-18}$  hydroxyalkyl;  $\text{C}_{3-10}$  cycloalkyl;  $\text{C}_{3-10}$  cycloalkyloxy;  $\text{C}_{3-10}$  cycloalkylthio;  $\text{C}_{3-10}$  cycloalkenyl;  $\text{C}_{3-10}$  cycloalkynyl; 5- or 6-membered heterocyclic, oxyheterocyclic or thioheterocyclic ring; or, when one of  $\text{R}^{25}$  or  $\text{R}^{26}$  is different from hydrogen, either  $\text{R}^2$  or  $\text{R}^4$  is selected from  $(=\text{O})$ ,  $(=\text{S})$ , and  $(=\text{NR}^{27})$ ;
- X is methylene selected from the group consisting of a divalent, saturated or unsaturated, substituted or unsubstituted  $\text{C}_1\text{C}_{10}$  hydrocarbon group optionally including one or more heteroatoms in the main chain (provided that the heteroatom is not linked to N of the imidazopyridyl ring), said heteroatoms being selected from the group consisting of O, S, and N (such as  $\text{C}_{1-6}$  alkylene, (for example  $\text{CH}_2$ ,  $\text{CH}(\text{CH}_3)$ ,  $\text{CH}_2\text{CH}_2$ ,  $\text{CH}_2\text{CH}_2\text{CH}_2$ ,  $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2$ ),  $(\text{CH}_2)_{2-4}\text{O}$ ,  $(\text{CH}_2)_{2-4}\text{S}$ ,  $(\text{CH}_2)_{2-4}\text{NR}^{10}$ ,  $(\text{CH}_2)_{2-4}$ ,  $\text{C}_{3-10}$  cycloalkylidene,  $\text{C}_{2-6}$  alkenylene (such as  $\text{CH}=\text{CH}\text{CH}_2$ ),  $\text{C}_{2-6}$  alkynylene);  
 ——— m is any integer from 0 to 2;

- $R^3$  is ~~selected from the group consisting of aryl; aryloxy; arylthio; aryl-~~  
 ~~$NR^{10}$ ; 5- or a 6-membered heterocyclic, oxyheterocyclic or thioheterocyclic ring;~~  
~~and each of said aryl, aryloxy, arylthio, aryl  $NR^{10}$ ; 5- or 6-membered heterocyclic,~~  
~~oxyheterocyclic or thioheterocyclic ring is optionally substituted with one or more~~  
 $R^{17}$ ;  ~~$C_{3-10}$ -cycloalkyl, oxycycloalkyl or thiocycloalkyl;  $C_{4-10}$ -cycloalkenyl with the~~  
~~proviso that the double bond cannot be adjacent to a nitrogen; and H with the~~  
~~proviso that if X is an alkylene, an alkenylene or an alkynylene, then X comprises~~  
~~at least 5 carbon atoms;~~
- $R^5$  is ~~independently~~ selected from the group consisting of hydrogen;  $C_{1-18}$  alkyl;  
 $C_{2-18}$  alkenyl;  $C_{2-18}$  alkynyl;  $C_{1-18}$  alkoxy;  $C_{1-18}$  alkylthio; halo; OH; CN;  $NO_2$ ;  $NR^7R^8$ ;  
 $OCF_3$ ; haloalkyl;  $C(=O)R^9$ ;  $C(=S)R^9$ ; SH; aryl; aryloxy; arylthio; arylalkyl;  $C_{1-18}$   
hydroxyalkyl;  $C_{3-10}$  cycloalkyl;  $C_{3-10}$  cycloalkyloxy;  $C_{3-10}$  cycloalkylthio;  $C_{3-10}$   
cycloalkenyl;  $C_{3-10}$  cycloalkynyl; 5 or 6 membered heterocyclic, oxyheterocyclic or  
thioheterocyclic ring;
- each  $R^6$  and  $R^{17}$  is independently selected from the group consisting of  
hydrogen;  $C_{1-18}$  alkyl;  $C_{2-18}$  alkenyl;  $C_{2-18}$  alkynyl;  $C_{1-18}$  alkoxy;  $C_{1-18}$  alkylthio;  $C_{3-10}$   
cycloalkyl,  $C_{3-10}$  cycloalkenyl or  $C_{3-10}$  cycloalkynyl; halo; OH; CN;  $NO_2$ ;  $NR^7R^8$ ;  
 $OCF_3$ ; haloalkyl;  $C(=O)R^{18}$ ;  $C(=S)R^{18}$ ; SH; aryl; aryloxy; arylthio; arylalkyl;  
arylalkyloxy (optionally a oxybenzyl); arylalkylthio (optionally a benzylthio); 5- or  
6-membered heterocyclic, oxyheterocyclic or thioheterocyclic ring;  $C_{1-18}$   
hydroxyalkyl; and each of said aryl, aryloxy, arylthio, arylalkyl, arylalkyloxy  
(optionally oxybenzyl), arylalkylthio (optionally benzylthio), 5- or 6-membered  
heterocyclic, oxyheterocyclic or thioheterocyclic ring, or  $C_{1-18}$  hydroxyalkyl is  
optionally substituted with 1 or more  $R^{19}$ ;

- each  $R^7$  and  $R^8$  is independently selected from the group consisting of H;  $C_{1-18}$  alkyl;  $C_{1-18}$  alkenyl; aryl;  $C_{3-10}$  cycloalkyl;  $C_{4-10}$  cycloalkenyl; 5- or 6-membered heterocyclic ring;  $C(=O)R^{12}$ ;  $C(=S)R^{12}$ ; and an amino acid residue linked through a carboxyl group thereof; alternatively,  $R^7$  and  $R^8$ , together with the nitrogen to which they are attached, combine to form a 5- or 6-membered heterocyclic ring;
- each  $R^9$  and  $R^{18}$  is independently selected from the group consisting of H; OH;  $C_{1-18}$  alkyl;  $C_{2-18}$  alkenyl;  $C_{3-10}$  cycloalkyl;  $C_{4-10}$  cycloalkenyl;  $C_{1-18}$  alkoxy;  $NR^{15}R^{16}$ ; aryl; and an amino acid residue linked through an amino group thereof;
- each  $R^{10}$  and  $R^{11}$  is independently selected from the group consisting of H;  $C_{1-18}$  alkyl;  $C_{2-18}$  alkenyl;  $C_{3-10}$  cycloalkyl;  $C_{4-10}$  cycloalkenyl; aryl;  $C(=O)R^{12}$ ; 5- or 6-membered heterocyclic ring; and an amino acid residue linked through a carboxyl group thereof;
- $R^{12}$  is independently selected from the group consisting of H;  $C_{1-18}$  alkyl;  $C_{2-18}$  alkenyl; aryl;  $C_{3-10}$  cycloalkyl;  $C_{4-10}$  cycloalkenyl; and an amino acid residue linked through an amino group thereof;
- each  $R^{15}$  and  $R^{16}$  is independently selected from the group consisting of H;  $C_{1-18}$  alkyl;  $C_{2-18}$  alkenyl;  $C_{2-18}$  alkynyl; aryl;  $C_{3-10}$  cycloalkyl;  $C_{4-10}$  cycloalkenyl; and an amino acid residue linked through a carboxyl group thereof.
- $R^{19}$  is independently selected from the group consisting of H;  $C_{1-18}$  alkyl, preferably  $C_{1-6}$  alkyl;  $C_{2-18}$  alkenyl;  $C_{2-18}$  alkynyl;  $C_{1-18}$  alkoxy, preferably  $C_{1-6}$  alkoxy;  $C_{1-18}$  alkylthio;  $C_{3-10}$  cycloalkyl;  $C_{4-10}$  cycloalkenyl;  $C_{4-10}$  cycloalkynyl; halo; OH; CN;  $NO_2$ ;  $NR^{20}R^{21}$ ;  $OCF_3$ ; haloalkyl;  $C(=O)R^{22}$ ;  $C(=S)R^{22}$ ; SH;  $C(=O)N(C_{1-6} \text{ alkyl})$ ,  $N(H)S(O)(O)(C_{1-6} \text{ alkyl})$ ; aryl; aryloxy; arylthio; and arylalkyl; and each of said aryl, aryloxy, arylthio, arylalkyl may be substituted with one or more halo, particularly a phenyl substituted with 1-2 halo; hydroxyalkyl; 5- or 6-membered heterocyclic, oxyheterocyclic or thioheterocyclic ring each unsubstituted or substituted with 1 or more halogens;

- each  $R^{20}$  and  $R^{21}$  is independently selected from the group consisting of H;  $C_{1-18}$  alkyl, preferably  $C_{1-6}$  alkyl;  $C_{2-18}$  alkenyl;  $C_{2-18}$  alkynyl; aryl;  $C_{3-10}$  cycloalkyl;  $C_{4-10}$  cycloalkenyl;  $C(=O)R^{12}$ ; and  $C(=S)R^{12}$ ;
- $R^{22}$  is independently selected from H; OH;  $C_{1-18}$  alkyl;  $C_{2-18}$  alkenyl;  $C_{1-18}$  alkoxy;  $NR^{23}R^{24}$ ; aryl;  $C_{3-10}$  cycloalkyl; and  $C_{4-10}$  cycloalkenyl;
- each  $R^{23}$  and  $R^{24}$  is independently selected from the group the group consisting of H;  $C_{1-18}$  alkyl, preferably  $C_{2-3}$  alkyl, wherein  $C_{2-3}$  alkyl taken together with N of  $R^{22}$  can form a saturated heterocycle, which heterocycle is optionally substituted with OH or aryl or an amino acid residue;
- each  $R^{25}$  or  $R^{26}$  is absent or is selected from the group consisting of H,  $C_{1-18}$  alkyl, preferably  $C_{1-4}$  alkyl;  $C_{3-10}$  cycloalkyl (such as cyclopentyl, cyclohexyl,  $C_{5-10}$  bicycloalkyl or adamantyl);  $C_{3-10}$  cycloalkenyl;  $(C_{3-8}$  cycloalkyl)- $C_{1-3}$  alkyl; aryl, such as phenyl; 5- or 6-membered heterocyclic ring, such as pyridyl; alkylaryl, such as benzyl; and each of said  $C_{1-18}$  alkyl, preferably  $C_{1-4}$  alkyl,  $C_{3-10}$  cycloalkyl,  $C_{3-10}$  cycloalkenyl,  $(C_{3-8}$  cycloalkyl)- $C_{1-3}$  alkyl,  $C_{5-10}$  bicycloalkyl, adamantyl, phenyl, pyridyl and benzyl is optionally substituted with 1-4 of each of  $C_{1-6}$  alkyl,  $C_{1-6}$  alkoxy, halo,  $CH_2OH$ , oxybenzyl, and OH; and heterocyclic ring having 3 to 7 carbon atoms, preferably a saturated heterocyclic ring wherein the heteroatoms are S, S(O), or S(O)<sub>2</sub> separated from the imidazopyridyl ring nitrogen atom by at least 2 heterocyclic ring carbon atoms., provided that either  $R^{25}$  or  $R^{26}$  is hydrogen, typically  $R^{25}$  or  $R^{26}$  is cyclopentyl or cyclohexyl; provided that if the compound is substituted at  $R^{25}$  or  $R^{26}$ , either  $R^2$  or  $R^4$  is selected from  $(=O)$ ,  $(=S)$ , and  $(=NR^{27})$ ; and
- $R^{27}$  is selected from the group consisting of H,  $C_{1-18}$  alkyl,  $C_{3-10}$  cycloalkyl,  $(C_{3-10}$  cycloalkyl)- $C_{1-6}$  alkyl; aryl; and arylalkyl, such as benzyl;
- or an isomer or solvate thereof, or a pharmaceutically acceptable salt thereof.

24. (Previously presented) The method according to claim 23, wherein said viral infection is an infection of a virus belonging to the family of the Flaviviridae.

25. (Previously presented) The method according to claim 23, wherein said viral infection is an infection of a hepatitis-C virus.
26. (Previously presented) The method according to claim 23, wherein said viral infection is an infection of a virus belonging to the family of the Picornaviridae.
27. (Previously presented) The method according to claim 23, wherein said viral infection is an infection of a Coxsackie virus.
28. (Previously presented) The method according to claim 23, wherein the effective amount of imidazo[4,5-c]pyridine derivative is suitable for separate, combined or sequential administration comprising the steps:
- (a) the administration of an effective amount of one or more compound(s) of formula (Z), as defined in claim 23; and
  - (b) the administration of an effective amount of one or more compound(s) effective in the treatment or prophylaxis of viral infections, including Flaviviral or Picornaviral enzyme inhibitors, in respective proportions such as to provide a synergistic effect against said viral infection.
29. (Previously presented) The method according to claim 23, wherein the effective amount of imidazo[4,5-c]pyridine derivative is suitable for administration orally, intranasally, subcutaneously, intramuscularly, intradermally, intravenously, intra-arterially, parenterally or by catheterization.
30. - 50. (Cancelled)
51. (New) The method according to claim 23, wherein the imidazo[4,5-c]pyridine

derivative of formula (Z) is selected from the group consisting of:

5-[(4-pyridinyl)methyl]-2-phenyl-5*H*-imidazo[4,5-*c*]pyridine;

5-[(2-pyridinyl)methyl]-2-phenyl-5*H*-imidazo[4,5-*c*]pyridine; and

5-[(3-pyridinyl)methyl]-2-phenyl-5*H*-imidazo[4,5-*c*]pyridine.

52. (New) The method according to claim 23, wherein the imidazo[4,5-*c*]pyridine derivative of formula (Z) has the formula:

